

Date: Mon, 8 Mar 93 03:12:32 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #288
To: Info-Hams

Info-Hams Digest Mon, 8 Mar 93 Volume 93 : Issue 288

Today's Topics:

 200km range radio phone? (2 msgs)
 Daily Solar Geophysical Data Broadcast for 07 March
 DJ 580 Mods
 Periphex...
 rec.radio.amateur.misc Frequently Asked Questions (Part 1 of 3)
 STS-55 Mission Postponed
 TH6DXX

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 8 Mar 93 03:01:58 GMT
From: usc!howland.reston.ans.net!newsserver.jvnc.net!netnews.upenn.edu!
netnews.cc.lehigh.edu!ns1.cc.lehigh.edu!amf7@network.UCSD.EDU
Subject: 200km range radio phone?
To: info-hams@ucsd.edu

Hi everybody,

a friend of mine in Italy is looking for a radio phone that works like a
cordless with a 100/200 Km range (+-100 miles).
Does anybody know if such thing exists? Thank you.

Aldo

--

Aldo Frigo #
Lehigh University

Date: Mon, 8 Mar 1993 07:06:57 GMT
From: usc!wupost!udel!darwin.sura.net!sgiblab!a2i!davidj@network.UCSD.EDU
Subject: 200km range radio phone?
To: info-hams@ucsd.edu

In <1993Mar8.030158.123787@ns1.cc.lehigh.edu> amf7@ns1.cc.lehigh.edu (ALDO MARCO FRIGO) writes:

>Hi everybody,

>a friend of mine in Italy is looking for a radio phone that works like a
>cordless with a 100/200 Km range (+-100 miles).
>Does anybody know if such thing exists? Thank you.

>Aldo

>--

># Aldo Frigo #
># Lehigh University #

Yes. You put a regular cordless phone (or one of the high power kluge ones they sell in international airport lounges all over the world) on top of a 5,000 foot mountain.

73
WA6NMF

--

Josephson Engineering, San Jose California MICROPHONES
Tel/ 408-238-6062 Fax/ 408-238-6022 INSTRUMENTATION

Date: 8 Mar 93 06:13:54 GMT
From: news-mail-gateway@ucsd.edu
Subject: Daily Solar Geophysical Data Broadcast for 07 March
To: info-hams@ucsd.edu

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 066, 03/07/93
10.7 FLUX=153.2 90-AVG=136 SSN=144 BKI=3332 1323 BAI=011

BGND-XRAY=B3.5 FLU1=6.2E+06 FLU10=3.8E+05 PKI=3342 1333 PAI=013
BOU-DEV=027,036,039,010,005,036,016,034 DEV-AVG=025 NT SWF=00:000
XRAY-MAX= C2.9 @ 1308UT XRAY-MIN= A0.0 @ 0809UT XRAY-AVG= B6.7
NEUTN-MAX= +001% @ 2130UT NEUTN-MIN= -003% @ 2355UT NEUTN-AVG= -0.7%
PCA-MAX= +0.3DB @ 2325UT PCA-MIN= -0.4DB @ 0300UT PCA-AVG= +0.1DB
BOUTF-MAX=55409NT @ 1350UT BOUTF-MIN=55377NT @ 1931UT BOUTF-AVG=55396NT
GOES7-MAX=E:+131NT@ 0709UT GOES7-MIN=N:-033NT@ 0818UT G7-AVG=+065,+051,+006
GOES6-MAX=E:+150NT@ 0700UT GOES6-MIN=N:-061NT@ 1132UT G6-AVG=+078,+026,-011
FLUXFCST=STD:150,150,145;SESC:150,150,145 BAI/PAI-FCST=020,035,025/030,040,025
KFCST=3334 5435 4455 6544 27DAY-AP=034,019 27DAY-KP=4554 3534 3434 4333
WARNINGS=*MAJFLR;*SWF;*PROTON;*PCA;*GSTRM;*AURMIDWCH
ALERTS=**245STRM:2032-2218UTC;**PROTNENH
!!END-DATA!!

Date: Mon, 8 Mar 1993 05:45:47 GMT
From: usc!wupost!udel!darwin.sura.net!news.duc.auburn.edu!ducvax.auburn.edu!
weinsjs@network.UCSD.EDU
Subject: DJ 580 Mods
To: info-hams@ucsd.edu

Hi, I am looking for any possible mods for the DJ 580. I appreciate your
time.
Sincerely,
KD4QZD-Jeffrey

Date: 8 Mar 93 06:51:57 GMT
From: swrinde!zaphod.mps.ohio-state.edu!moe.ksu.ksu.edu!osuunx.ucc.okstate.edu!
constellation!aardvark.ucs.uoknor.edu!ns1.nodak.edu!plains!ndsuvml!
ud173191@network.UCSD.EDU
Subject: Periphex...
To: info-hams@ucsd.edu

Ok, Ok. Maybe Periphex isn't completely at fault here. Granted, I did
drop the battery, but I didn't think it unreasonable that a battery/radio
could take a six-inch drop onto a table. I wrote the last post about
a minute after I got off the phone with Periphex's obnoxious tech
department, who seemed only too anxious to get me off the phone and send
in my check. Customer service at its finest. In addition, I'm not
entirely convinced it was the fall that "did in" my battery. Another
ham I spoke to here in Grand Forks said he had a similar battery fall
apart merely from taking it off and putting it back onto the radio
many times. The bottom line is, of course, that the original Icom
design is what's lousy. Given similar usage among several batteries,
however, I've never had a problem with Icom--just this one from

Periphex. I should have waited before writing the original post--I was more irritated with the tech department's attitude than anything else. I wonder--as a possible solution to the rail problem if they couldn't make the rails out of metal like the batteries for the 2AT or the 2GAT. It would add almost no weight and make the rails almost indestructible.

Just wanted to clarify...

Greg Moore N00DQ
President, Sioux Amateur Radio Club
University of North Dakota
Grand Forks, ND (Flat land, no trees, and 150 Minuteman III Silos!)

Date: 7 Mar 93 10:43:02 GMT
From: rtech!amdahl!amdahl!uts.amdahl.com@decwrl.dec.com
Subject: rec.radio.amateur.misc Frequently Asked Questions (Part 1 of 3)
To: info-hams@ucsd.edu

Posted-By: auto-faq 2.4
Archive-name: radio/ham-radio/faq/part1
Revision: 3.7 02/19/93 17:18:18

Rec.radio.amateur.misc Frequently Asked Questions
Part 1 - Introduction to the FAQ and Amateur Radio

This is a regular posting of frequently-asked questions (FAQ) about Amateur Radio, also known as Ham Radio. It is intended to summarize some common questions on the rec.radio.amateur.misc newsgroup and Info-Hams mail list as well as to help beginners get started.

Please provide a copy of the FAQ to any new or soon-to-be Hams you know.

Regular FAQ postings can help save network bandwidth and maintain a good signal-to-noise ratio in the newsgroup. However, they can't do it alone - you, the reader, have to use them. If you are a new user, please print and review the FAQ articles and look at the instructions in the news.newusers newsgroup before posting any articles. If you are an experienced user, please help by refraining from answering frequently-asked questions on the newsgroup if they are already answered by the FAQ articles. Instead, send e-mail to the user who asked the question. (It will be helpful if you include the part of the FAQ that answers their question, but not the whole thing.)

The FAQ cannot always prevent people from posting repetitive questions. But even if hundreds of questions get posted, it saves you from having to answer them hundreds of times. Also, a friendly pointer to the FAQ in your first

answer can help that person refer to the FAQ in the future. That is when we can begin to get a real savings of network bandwidth.

To reduce the size of each article, the FAQ information is posted in 3 parts:

Part 1 - Introduction to the FAQ and Amateur Radio

Part 2 - Amateur Radio Organizations, Services, and Information Sources

Part 3 - Amateur Radio Advanced and Technical Questions

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--Rec.radio.amateur.misc Frequently-asked Questions-----Part 1--

** Introduction to the FAQ

* How to Contribute to the FAQ Articles

We accept suggestions from the Amateur Radio community. Please

consider the following criteria:

- is it a commonly asked question?
 - will its inclusion help reduce the usage of network bandwidth?
 - how useful is it to beginning Hams or to the majority of Hams?
- Contributions don't have to meet all of these but the minimum is one. We actually only ask that you consider these before contributing.

We can't necessarily include every question or every topic - the network simply doesn't have enough bandwidth to carry that much information. Besides, the point is that we're trying to conserve network bandwidth. You can find the locations of much more information by referring to the "Index to the rec.radio.amateur.* Supplemental Archives" posted monthly by Paul Schleck KD3FU.

If you suggest a question for this FAQ, please include the answer. You'll get credit for your contribution and you'll speed up the process of getting the information ready for distribution.

If you feel your contribution is sufficient to meet the considerations shown above, send it to hamradio-faq@amdahl.com so that it will reach all the FAQ coordinators: (listed in alphabetical order)

Diana L Carlson	KC1SP	dls@genrad.com	(Hudson, NH, USA)
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* Acknowledgements

All questions listed as modified "pre-4/92" are entirely Diana Carlson's work or her editing of a contributor's work. Diana established this FAQ. She is now one of the larger group that maintains it but we didn't want her effort to be lost in the crowd.

* Notes on "Netiquette"

The rec.radio.amateur.misc newsgroup and Info-Hams mail list have a large daily volume of traffic. They can operate more efficiently if the following netiquette guidelines are followed. Please take them seriously.

- * If you are new to UseNet, the introductory articles in news.announce.newusers are required reading. Go to that newsgroup now.
- * When posting a followup article, ALWAYS try to minimize the number

of lines of quoted material from the original article.

- * As a general rule when you try to determine whether to reply to someone by e-mail or with a followup article, remember to "praise in public, criticize in private." It's OK to disagree technically but be careful not to attack the person with whom you disagree. Also, be careful with your use of the word "you" when posting a follow-up article. Many unnecessary flame wars have started that way.
- * Use a descriptive subject. For example, a message subject of "Ham Radio" tells the reader NOTHING about the contents of your article since the whole newsgroup is about Ham Radio. Other examples of subjects which are so broad that they become useless could include, "Help," "A Question," "Antennas," or "Frequencies." Maybe "Books on Antennas?" or "Where can I find Repeater Frequencies?" would be better, for example. Remember, in a busy newsgroup a lot of users decide which articles to read from the subject line alone. If you post, don't deprive yourself of an audience!
- * Before answering a question, check if the FAQ adequately answers it or if someone else already answered it. If you have more to add, make sure to reference either the FAQ or the related articles.
- * If a user posts a question which is directly answered by the FAQ, there is no need to post an answer - the information is already available on the newsgroup. Instead, just send an e-mail message which politely explains where to find the FAQ. They will probably appreciate it if you include the answer to their question. (Don't send a "nastygram" - that would just discourage future participation.)
- * Pay attention to the size of your audience - use the "Distribution:" header. If you leave it blank, your message will go to every civilized country in the world and occupy disk space in all news systems in all those places. If that's what you intend, that's fine but make sure your article is relevant outside your country. (In particular, Hams should already know there is more to the world than just their own country.)
- * If you have an item for sale, please limit the distribution area so that, for example, an article about a radio for sale in New Jersey won't get to California or Europe. If you wish, you may cross-post your for-sale article to rec.radio.swap.
- * Software sources should be posted to either alt.sources, comp.sources.misc, or comp.sources.* for a specific machine type. Software binaries should be posted to the appropriate subgroup of comp.binaries.

** What is Amateur Radio?

Amateur Radio is a non-commercial radio communication service whose primary aims are public service, technical training and experimentation, and communication between private persons. Amateur Radio operators are commonly called hams. Hams often communicate with each other recreationally but also provide communications for others at public

events or in times of emergency or disaster.

**** Who can become a ham in the United States?**

Anyone who is not a representative of a foreign government can be an Amateur Radio operator in the USA. There are tests that you must pass to get a license, however the tests are not insurmountable.

**** Where can I locate information and books on Amateur Radio?**

Your local Radio Shack sells some ham radios and Amateur Radio license books. Books can also be obtained through the mail from ham radio organizations, such as ARRL in Newington, CT (203-666-1541) and W5YI in Dallas, TX (1-800-669-9594). There may be one or two ham radio stores in the local area (ie, within 50 miles). Try looking in the Yellow Pages under Radio Communications.

For the Novice license, get a Novice License manual, plus 5-word-per-minute Morse code tapes, costing around \$25. For the Technician license, get a combined Novice and Technician License manual, and an FCC Rules manual, costing around \$32. The FCC Rules manual is a good idea for Novice also, but not necessary, since the Novice License manual contains all the FCC Rules that are required for the Novice License.

The ARRL Education Activities Department has several programs to help amateurs (or prospective amateurs) to get started. Ask for a "New prospect package" available free of charge, from ARRL HQ, Educational Activities Department, 225 Main St, Newington, CT 06111.

**** How much does it cost?**

To take the Novice tests, it's free. To take the Technician or higher class tests, there is a small charge (around \$5-\$6 currently) to cover copying costs and running the testing sessions. The cost of a radio is really dependent on what you want to do. You can make your own radio and antenna for under \$150. You can buy a used single-band radio for \$150-\$300. Or you can buy a new multi-band multi-mode radio with all the doodads for \$300-\$3000. I'd suggest you learn more about ham radio, talk to local hams, find out what you want to do with ham radio first.

**** Where can I take the tests?**

The Novice tests can be given by any two qualified hams of General class license or above. The Technician tests and all higher class license tests are given by three qualified Volunteer Examiners (VEs) who volunteer their time.

To locate an ARRL testing session in your area, you can contact ARRL at 203-666-1541 x282.

**** What are the tests like?**

First off, come prepared to VE sessions. Bring: TWO forms of ID, one of which has a picture on it; a calculator (if necessary); a pen and two pencils; the applicable examination fee (around \$5-\$6 for 1992); the original AND a copy of your current Amateur Radio license (if you have one); the original AND a copy of any CSCEs for tests you've already passed (if you have any).

Each of the written tests (Novice, Technician, General, Advanced, and Extra) are generally a multiple choice test of approximately one-tenth of the question pool. For example, if the question pool is approximately 300 questions, then the test will be a 30-question test. You need to get 75% correct to pass. Note that they truncate to determine the correct number of questions. That means for a 30 question test, you need to get 22 right, which is actually only 73.3%.

Once you've paid the small fee for Technician-Extra tests, it costs no extra to take another test, so I'd suggest you keep taking the next more advanced test until you fail. If you pass the written but not the Morse code (or vice versa) for a specific class license, you have up to one year to take the other test before you would have to retake the written test again. Note that some VEs will not allow you to take the written test unless you've first taken the Morse code test.

The Morse code test is a receiving test only. The test run 5 to 7 minutes. After the test, you are given a 10-question multiple-choice or fill-in-the-blank test. Passing grade is 7 or more. If you fail the 10-question test, the examiner team will examine your copy sheet to see if you have 1 minute of solid copy with no errors. For 5 wpm, that's 25 characters, for 13 wpm, that's 65 characters, for 20 wpm, that's 100 characters. If they can find 1 minute solid copy, you've still passed.

Hints on Morse code tests: Generally, it will be a standard QSO (conversation), and it MUST contain at least one of each of the following:

26 letters A-Z, 10 numbers 0-9, comma (,), period (.), slant or slash (/), question mark (?), double dash prosign (BT), end of message prosign (AR), end of contact prosign (SK).

The letters count as one character, all others count as two characters. There are a couple other prosigns which are worth knowing, but will not be on the test, like "I'm done talking, next" is K, "I'm done talking, back to you" is KN, "Please wait" is AS.

**** What can I do with a ham radio license?**

There are so many things, it's a difficult question to answer, but

here's some ideas:

- * Talk to people in foreign countries.
- * Talk to people (both local and far away) on your drive to work.
- * Help in emergencies by providing communications.
- * Provide communications in parades or walkathons.
- * Help other people become hams.
- * Hook your computer to your radio and communicate by computers.
- * Collect QSL cards (cards from other hams) from all over the United States and foreign countries and receive awards.
- * Participate in contests or Field Day events.
- * Provide radio services to your local Civil Defense organization thru ARES (Amateur Radio Emergency Service) or RACES (Radio Amateur Civil Emergency Service).
- * Aid members of the US military by joining MARS (Military Affiliate Radio System).
- * Participate in transmitter hunt games and maybe build your own direction-finding equipment.
- * Have someone to talk to on those sleepless nights at home.
- * Receive weather pictures via satellites.
- * Build radios, antennas, learn some electronics and radio theory.
- * Talk to astronauts in space, or use the moon to bounce signals back to people on the Earth.
- * Experiment with Amateur TV (ATV), Slow-Scan TV (SSTV), or send still-frame pictures by facsimile.
- * Experiment with amateur satellite communications.

** What can't I do with an Amateur Radio license?

The most important thing you can't do is transact business of any kind over ham radio. Interference to other hams or services, as well as obscene, profane or indecent language is not tolerated and is illegal. Music and broadcasting are not allowed on ham radio. Some personal conversations may not be appropriate to Amateur Radio. Do you really want the whole world to hear about Aunt Mabel's hemorrhoids?

** I'm interested, who will help me?

There are hams who are willing to become "Elmers" (mentors, helpers) in your local area. Look around and ask local hams. Search out local radio clubs. As well, some people have volunteered to be an Elmer over the Usenet. A list of UseNet Elmers and their e-mail addresses is posted to the newsgroup monthly. If anyone wants to be an Elmer, send e-mail to
elmers-request@unomaha.edu

** Should I build my own equipment or antenna?

"Homebrewing" is a fun and educational part of ham radio. It is a thrill to build your own transmitter and put it on the air. However, building your own receiver can be quite complicated; if you don't have

electronics experience, you may want to buy a receiver instead. Most homebrew transmitters are QRP (transmit very low power). That's fine for an experienced ham with a very good antenna, but a Novice ham will just get frustrated. Your first rig, therefore should NOT be a homebrew.

Antennas can be much simpler projects than the transceiver, though some types are also quite involved. Most hams build their own antennas for base station use and buy antennas for mobile (car) use. Most beginner ham books describe how to build different types of antennas. Order of difficulty, from easiest to more difficult, for some common antennas are: wire dipole, Zepp, Yagi, Quad, and Log-Periodic. Books from many sources, including ARRL and several Hams, discuss antennas in depth.

When building or even understanding antennas, it is good to know the relationship between the antenna element length and the frequency or wavelength it is designed for. An antenna performs best at multiples of 1/4 of that wavelength, though 5/8 wave also has beneficial qualities. The wavelength is related to the frequency with the following formula:

wavelength (in meters) = 300 / frequency (in megahertz)

You do not need a huge antenna or tower like ones you may see around your neighborhood. Large beam antennas and 40-foot towers are very expensive. As a beginner, a simple dipole antenna is perfectly adequate. As you gain experience (and money :-), you may want to invest in something bigger.

If you can afford new rigs and antennas, there are many mail order stores that advertise in ham radio magazines. If you want to buy a used rig, the best place is at a "hamfest" (ham flea market). You should take along an experienced ham, since some of the used equipment may be inoperative, overpriced or poor quality. You can also answer ads in ham magazines or posted at ham radio stores, although often, by the time you call, the equipment has already been sold.

Date: 8 Mar 93 03:26:33 GMT
From: news-mail-gateway@ucsd.edu
Subject: STS-55 Mission Postponed
To: info-hams@ucsd.edu

SB SAT @ AMSAT \$ANS-065.05
STS-55 SAREX Update

HR AMSAT NEWS SERVICE BULLETIN 065.05 FROM AMSAT HQ
SILVER SPRING, MD MARCH 7, 1993 BID: \$ANS-065.05
TO ALL RADIO AMATEURS BT

Launch of Space Shuttle Mission STS-55 Postponed

The following is a message from the SAREX working group.

The launch of the STS-55 Space Shuttle Columbia mission, carrying the SAREX payload, has been delayed until no earlier than March 19, 1993. Since this launch date is still tentative, a new Keplerian Element set has not been generated. The SAREX Working group would like to remind all radio amateurs that Official SAREX Keplerian elements are provided primarily by 2 SAREX team members: Gil Carman, WA5NOM, at the Johnson Space Center (JSC) and Ron Parise, WA4SIR, at the Goddard Space Flight Center (GSFC). To ensure accurate Shuttle orbit data only rely on SAREX Keplerian Elements generated by one of these two individuals.

The above was submitted by the following SAREX team members: Frank Bauer, KA3HDO, Lou McFadin, W5DID, Ron Parise, WA4SIR, Gil Carman, WA5NOM, Carl Kotila, WD5JRD, and Andy MacAlister, WA5ZIB

/EX

Date: 8 Mar 1993 09:56:21 GMT
From: news.tele.fi!news.valmet.com!kolja!ral@uunet.uu.net
Subject: TH6DXX
To: info-hams@ucsd.edu

Hello!

I have the TH6DXX antenna, but not the manual.
I'm intersted in knowing more about this antenna e.q.
the technical specification.
I would be qreatful if you have the information and
could send it to me.

73 de rauno/oh3nbj/oh5nbj

Rauno Lankinen

) internet ral@tre-vta.valmet.com

#

# Application designer) phone	+358-31-241 2286	#
# Valmet-Tampella Inc.) fax	+358-31-2412290	#
# P.O. BOX 267) telex	22117 TAMEC SF	#
# SF-33101 TAMPERE, FINLAND)		#

End of Info-Hams Digest V93 #288
